REMARKS

The Office Action dated March 20, 2003 has been received and carefully noted. The above amendments to the claims, and the following remarks, are submitted as a full and complete response thereto.

Claims 1-12 are pending in the application. By this Amendment, Applicant has amended claims 1-4, 7 and 10-12 to more particularly point out and distinctly claim the present invention. Claims 5, 6, 8 and 9 have been canceled without prejudice. In view of the following remarks, reconsideration and allowance of claims 1-4, 7 and 10-12 are respectfully requested.

CLAIM REJECTIONS UNDER 35 USC § 102

Claims 1-12 were rejected under 35 U.S.C. 102(b) as being anticipated by IWANO (EP 0732786A1). Applicants respectfully submit that the prior art cited in the Office Action fails to teach, suggest or disclose the features of the claimed invention.

Claims 5, 6, 8 and 9 are canceled without prejudice. Thus, the rejection regarding these claims is moot.

Claim 1, upon which claims 2-4 are dependent, recites a method of measuring wavelengths of optical signals traveling in an optical fiber. The method includes the steps of conducting, converting, adjusting and determining. The conducting step conducts the optical signals to a narrowband optical filter controllable by a control signal, the interdependence between the wavelength of an optical signal obtained from the output of the filter and the wavelength of the control signal being known. The converting step

converts the optical signals obtained from the output of the optical filter into an electric signal. The adjusting step adjusts the filter by changing the control signal in such a way that the window formed by its pass band will scan the entire wavelength range being measured. The determining step determines the control signals corresponding to the peak values of the electric signal, and determines the wavelengths corresponding to the control signals.

Claim 7, upon which claims 10-12 are dependent, recites an arrangement for measuring wavelengths of optical signals traveling in an optical fiber. The arrangement includes a narrowband optical filter, a light detector and a control electronics circuit. The narrowband optical filter is controllable by control signal, and the interdependence between the wavelength of an optical signal is obtained from the filter output. The wavelength of the control signal is known and the narrowband optical filter has as an input the optical signals to be measured. The light detector connects to the output of the optical filter and is capable of converting the optical signals into an electric signal. The control electronics circuit connects to the control input of the filter to give the control signal being adjustable for scanning the entire wavelength range being examined and connects to the light detector to receive the electric signal.

Applicants submit that IWANO fails to disclose or suggest the elements of the invention as set forth in the claimed invention, and thereby fails to provide the critical and nonobvious advantages that are provided by the invention. In order to anticipate a claim, it is well established that a reference must disclose every element of the claim.

Verdegaal Bros. V. Union Oil Co., 2 USPQ2d 1051, 1053 (Fed. Cir. 1987). The identical invention must be shown in as complete detail as is contained in the claim. *Richardson v. Suzuki Motor Co.*, 9 USPQ2d (Fed. Cir. 1989).

IWANO discloses a method and device for optical amplification. In IWANO, an optical direct amplifier (11) amplifies input signals subjected to wavelength division multiplexing (WDM). An optical feedback is used, including a beam splitter (12) that splits the amplified WDM signals into two signals. An optical filter (13A) separates a particular optical signal from one of the two outputs of the beam splitter (12). An optoelectrical converter (14) converts the separated optical signal to a corresponding electrical signal. A gain controller (15) controls the gain of the direct amplifier (11) on the basis of the electric signal output from the converter (14). The optical filter (13A) may be replaced with an optical variable filter (13B) and controlled by control means when the optical signal for gain control is shut off or sharply varied in wavelength. Because the gain of the direct amplifier (14) is controlled by use of one particular signal of the plurality of WDM signals, the individual optical signal is controlled to a preselected level even when the number of WDM signals is changed.

Applicant respectfully submits that IWANO fails to disclose or suggest each and every element of the claimed invention, as required for a rejection under 35 USC § 102. For instance, according to one embodiment, the invention defines a method for determining the nature of the channels provided by the optical signals present in an optical fiber. Using the method of the invention, the number, wavelengths and relative

power differences of optical signals in the optical fiber can be measured (see, for example, page 3, lines 14-19 of the application). In the method of the present invention, the entire wavelength range used by the optical signals is scanned. A control signal for each peak of the electric signal is determined and this control signal is then used to determine the wavelength of each optical signal.

IWANO, however, discloses a method of amplifying optical signals. In the method of IWANO, only one optical signal is selected to be used for gain control. The central processing unit CPU of IWANO monitors the output of the optoelectrical converter and, on detecting the peak of the optical signals, sends a command to start the gain control. In the method of IWANO, sweeping takes place from the short wavelength side to the long wavelength side. The gain control is initiated when the first peak is detected and the gain control continues until the output of the converter sharply falls, for example when the signal is shut off. IWANO, however, does not disclose or even suggest that the entire wavelength range used by the optical signals can be scanned for determining the channels as a whole in the optical fiber. Furthermore, IWANO is silent about the relative strengths of the signals.

For at least these reasons, IWANO fails to anticipate independent claims 1 and 7 since IWANO fails to disclose, teach or suggest at least, the limitations of adjusting the filter by changing the control signal in such a way that a window formed by its pass band will *scan the entire wavelength range* being measured and *determining the wavelengths corresponding to the control signals*.

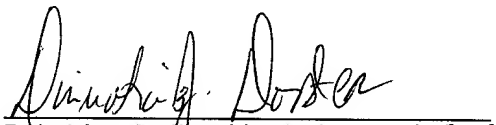
Claims 2-4 depend from claim 1, and claims 10-12 depend from claim 7 and are therefore allowable for the reasons that claims 1 and 7 are allowable, respectively, and for the specific limitations recited therein.

Thus, Applicant submits that certain clear and important distinctions exist between the cited prior art and the claimed invention. Applicant submits that these distinctions are more than sufficient to render the claims of the invention unanticipated by and unobvious in view of the prior art. Therefore, it is therefore requested that claims 1-4, 7 and 10-12 be found allowable, and this application passed to issue.

If for any reason the Examiner determines that the application is not now in condition for allowance, it is respectfully requested that the Examiner contact, by telephone, the applicant's undersigned attorney at the indicated telephone number to arrange for an interview to expedite the disposition of this application.

In the event this paper is not being timely filed, the applicant respectfully petitions for an appropriate extension of time. Any fees for such an extension together with any additional fees may be charged to Counsel's Deposit Account 50-2222.

Respectfully submitted,



Dinnatia J. Doster
Registration No. 45,268

Customer No. 32294
SQUIRE, SANDERS & DEMPSEY LLP
14TH Floor
8000 Towers Crescent Drive
Tysons Corner, Virginia 22182-2700
Telephone: 703-720-7800
Fax: 703-720-7802

DJD:cct

Enclosures: Petition for Extension of Time
Notice of Appeal